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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,398	02/04/2000	Soren V. Andersen	20184-000100US	8774

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EXAMINER

ARMSTRONG, ANGELA A

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/498,398

Applicant(s)

ANDRSEN ET AL

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&7. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 20 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Shlomot (US Patent No. 6,377,931).

3. Shlomot teaches a system for speech manipulation for continuous speech playback over a packet network.

4. Regarding claims 1 and 22-25, Shlomot discloses a system for manipulating the length of received signal frames by performing time expansion or time compression of one or more signal frames at time varying intervals and with time varying lengths of the expansion or the compression at col. 3, line 67 continuing to col. 5, line 34.

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5. Regarding claim 2, Shlomot discloses time varying lengths dependent upon a signal fitting criteria with respect to signal characteristics at col. 4, lines 55-63; col. 6, line 65 to col. 7, line 4; col. 7, lines 15-20.

6. Regarding claim 3, Shlomot discloses resolution of the length manipulation is a fraction of the time between two samples at col. 4, lines 55-63; col. 6, line 65 to col. 7, line 4; col. 7, lines 15-20.

7. Regarding claims 4 and 5, Shlomot discloses storing frames in the jitter buffer and monitoring of the jitter buffer to initiate the manipulating step at col. 4, lines 32 continuing to col. 5, line 4.

8. Regarding claim 20, Shlomot discloses the signal frame is a sound signal frame resulting from a decoding operation of a data packet at col. 4, lines 45-54.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shlomot in view of Wasem et al.

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11. Regarding claims 6-12, although Shlomot discloses time expansion and compression of the decoded data, Shlomot does not specifically implement lost frame substitution, merging or smoothing of the data in the manipulating process.

12. Wasem discloses a system of waveform substitution in packet communications. Specifically, Wasem teaches waveform substitution as a means of improving the speech quality of transmitted data (abstract) and describes the packet merging technique which is implemented to smooth the boundaries of received packets and substituted packets, wherein when overlapping portions of the packets are combined, the resultant waveform has smooth transitions (page 344, col. 2, section D. Packet Merging).

13. Therefore, it would have been obvious to one of ordinary skill at the time of the invention to implement the waveform substitution and packet-merging techniques of Wasem in the speech communications network of Shlomot, for the purpose of improving the speech quality of the transmitted speech, as suggested by Wasem.

14. Claims 13-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shlomot in view of Kubin et al.

15. Regarding claims 13-19 and 21, although Shlomot discloses time expansion and compression of the decoded data, Shlomot does not specifically implement an oscillator model when manipulating the lengths of the signal frames.

16. Kubin discloses a system for time-scale modification of speech based on a nonlinear oscillator model. Specifically, Kubin describes the oscillator model (page 453, col. 1, section 1.2), a state-transition codebook (page 453, col. 1, section 1.3) and application of the oscillator

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and codebook in time-scale modification (page 455, col. 1, section 3). Kubin teaches that the system provides for high quality output at moderate computational cost.

17. Therefore, it would have been obvious to one of ordinary skill at the time of the invention to implement the time scale modification with oscillator model and state codebook techniques of Kubin in the speech communication system of Shlomot, for the purpose of improving the speech quality of the transmitted speech at a moderate computational cost.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Mandal et al (US Patent No. 5,862,450) discloses a method and apparatus for delivering simultaneous constant bit rate compressed video streams at arbitrary bit rates.

20. Covell et al (US Patent No. 5,828,994) discloses a system for non-uniform time-scale modification of recorded audio.

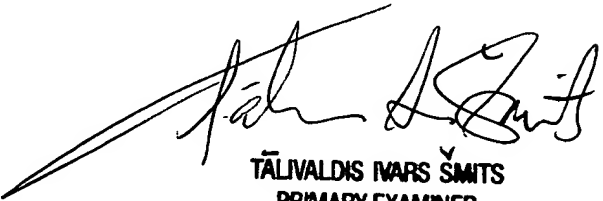
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

AAA  
September 30, 2002



TĀLIVALDIS IVARS ŠMITS  
PRIMARY EXAMINER